

Category: Commercial Harborcraft

A commercial harborcraft is a vessel used for commercial purposes. These vessels generally operate within California coastal waters and inland waterways and have a home port within California. Commercial harborcraft includes crew and supply boats, fishing vessels, ferry and excursion vessels, pilot vessels, towboat or push boats, tug boats and work boats.

Emissions Inventory:

The baseline inventory for commercial harborcraft was revised in November, 2005. Emissions are calculated by multiplying the number of engines, the horsepower, the load factor, the annual hours of operation and the emission factor. Adjustments to the baseline inventory were made to estimate the impact of useful life, deterioration, and attrition.

The vessel population and number of engines was based upon data from the US Coast Guard, the California Department of Fish and Game, the ARB Commercial Harborcraft Survey, and information from recent emission inventory estimates generated for the Port of Los Angeles. Vessel annual hours of operation and location was estimated based upon the Survey results.

Engine profiles containing horsepower and age were developed based upon detailed data collected in Survey. Engine profiles were compiled into a database and used to determine a per vessel emission rate by vessel type.

OFFROAD emission factors were used to calculate emissions. However, because OFFROAD emission factors are based on a "C1" engine test cycle, ARB staff adjusted the emission factors to better reflect the "E3" test cycle that is more representative of marine engines.

Future year growth rates of harbor craft are either flat or declining. Except for tugboats, growth rates vary by district and have been defined by the district where the activity occurs. Tug boats are expected to stay at the current level for the foreseeable future.

Input Data Sources:

The input factors used for commercial harborcraft come from various data sources:

| Input Factor | Source of Data (Diesel) |
|--------------------------|--|
| Population | US Coast Guard, CA Dept. of Fish and Game |
| Engine Horsepower | ARB Commercial Harborcraft Survey (2003) |
| Engine Age | ARB Commercial Harborcraft Survey (2003) |
| Load Factor | ARB Commercial Harborcraft Survey (2003) |
| Emission Factors | ARB OFFROAD Model Emission Factors, Adjusted to E3 Test Cycle |
| Growth Factors | ARB Commercial Harborcraft Survey, Air Pollution Control Districts |

Adopted Regulations for Commercial Harborcraft

2005: MARPOL Class 2 NOx Standards go into effect

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